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# United States Standards for Beans

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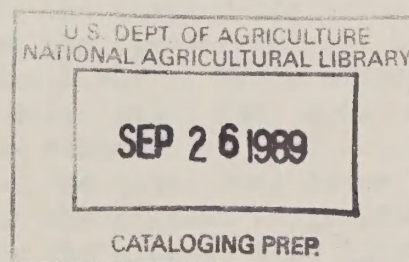
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**UNITED STATES STANDARDS FOR BEANS**

United States Department of Agriculture  
Federal Grain Inspection Service  
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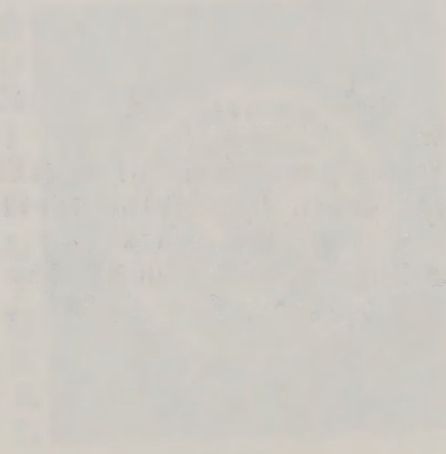


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# UNITED STATES STANDARDS FOR BEANS 1/

Effective June 4, 1982

## TERMS DEFINED

### § 68.101 Beans

Beans shall be dry threshed field and garden beans, whole, broken, and split, commonly used for edible purposes.

### § 68.102 Classes 2/

Beans shall be divided into classes as follows, each of which, except Mixed beans, may contain not more than 2.0 percent of beans of contrasting classes and not more than 15.0 percent of beans of other classes that blend:

Pea beans (the type as grown in the Great Lakes region know also as Navy beans).

Blackeye beans (cowpeas of the Blackeye variety).

Cranberry beans (known also as Speckled Cranberry and Horticultural Pole).

Yelloweye beans.

Pinto beans (including the Mexican Pinto type but not the type known as Spotted Red Mexican).

Marrow beans (not including Red Marrow).

Great Northern beans.

Small White beans (the type as grown on the Pacific coast, not including Tepary beans).

Flat Small White beans (the type as grown in northern Idaho).

White Kidney beans.

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1/Compliance with the provisions of these standards does not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act, or other Federal Laws.

2/The use of a variety name in the designation of the class of beans does not imply any guarantee of varietal purity.

Light Red Kidney beans.

Dark Red Kidney beans.

Small Red beans (know also as Red Mexican, California Red, and Idaho Red).

Pink beans.

Black Turtle Soup beans.

Mung beans.

Miscellaneous beans: Beans that are not otherwise classified in these standards shall be classified and designated according to the commonly accepted commercial name of such beans.

Large Lima beans (characteristic of the Large White Pole and Burpee Bush Lima type).

Baby Lima beans (characteristic of Small White Lima beans of the Henderson Bush and similar types).

Miscellaneous Lima beans: Lima beans that do not come within the classes Large Lima or Baby Lima shall be classified and designated according to their commonly accepted commercial name.

Mixed beans: Mixed beans shall be any mixture of beans not provided for in the classes listed above.

#### § 68.103 Grades.

Grades shall be the numerical grades, substandard grades, sample grades, and special grades provided for in §§ 68.133 through 68.142.

#### § 68.104 Sound beans.

Sound beans shall be beans that are free from defects.

#### § 68.105 Defects.

Defects for the classes Baby Lima and Miscellaneous Lima beans shall be damaged beans, contrasting classes, and foreign material. Defects for all other classes of beans shall be splits, damaged beans, contrasting classes, and foreign material.

#### § 68.106 Splits.

Splits shall be pieces of beans that are not damaged, each of which consists of three-fourths or less of the whole bean, and shall include any sound bean the halves of which are held together loosely.

§ 68.107 Damaged beans.

Damaged beans shall be beans and pieces of beans that are damaged by frost, weather, disease, weevils, or other insects, or other causes.

§ 68.108 Badly damaged beans.

Badly damaged beans shall be beans and pieces of beans that are materially damaged or discolored by frost, weather, disease, weevils or other insects, or other causes so as to materially affect the appearance and quality of the beans.

§ 68.109 Foreign material.

Foreign material shall be stones, dirt, weed seeds, cereal grains, lentils, peas, and all matter other than beans.

§ 68.110 Stones.

Stones shall be concreted earthy or mineral matter, and other substances of similar hardness that do not disintegrate readily in water,

§ 68.111 Contrasting classes.

Contrasting classes shall be beans of other classes that are of a different color, size, or shape from the beans of the class designated.

§ 68.112 Classes that blend.

Classes that blend shall be sound beans of other classes that are similar in color, size, and shape to the beans of the class designated, and shall include white beans in the class Yelloweye which are similar in size and shape to the Yelloweye beans.

§ 68.113 Broken beans.

Broken beans shall be sound beans with some but less than one-fourth of each bean broken off or with one-fourth or more of the seedcoat removed.

§ 68.114 Blistered beans.

Blistered beans shall be sound beans with badly blistered or burst seedcoats.

§ 68.115 Wrinkled beans.

Wrinkled beans shall be sound beans that have deeply wrinkled seedcoats and/or are badly warped or misshapen.

§ 68.116 Weevily beans.

Weevily beans shall be beans that are infested with live weevils or other insects injurious to stored beans or that contain weevil-bored beans.



§ 68.117 Clean-cut Weevil-bored beans.

Clean-cut weevil-bored beans shall be beans from which weevils have emerged, leaving a clean-cut open cavity free from larvae, webbing, refuse, mold, or stain.

§ 68.118 Well screened.

Well screened, as applied to the general appearance of beans, shall mean that the beans are uniform in size and are practically free from such small, shriveled, underdeveloped beans, splits, broken beans, large beans, and foreign material that can be removed readily by the ordinary process of milling or screening through the proper use of sieves.

§ 68.119 (Reserved)

§ 68.120 30/64 Sieve.

A 30/64 sieve shall be a metal sieve 0.0319-inch thick perforated with round holes 0.4687 (30/64) inch in diameter which are 11/16 inch from center to center. The perforations of each row shall be staggered in relation to the adjacent rows.

§ 68.121 28/64 Sieve.

A 28/64 sieve shall be a metal sieve 0.0319-inch thick perforated with round holes 0.4375 (28/64) inch in diameter which are 19/32 inch from center to center. The perforations of each row shall be staggered in relation to the adjacent rows.

§ 68.122 24/64 Sieve

A 24/64 sieve shall be a metal sieve 0.0319 inch thick perforated with round holes 0.3750 (24/64) inch in diameter which are 17/32 inch from center to center. The perforations of each row shall be staggered in relation to the adjacent rows.

§ 68.129 (Reserved).

PRINCIPLES GOVERNING APPLICATION OF STANDARDS

§ 68.130 Basis of Determination.

The determination of "color" including "off-color" shall be upon the basis of the beans after the removal of defects. All other determinations shall be upon the basis of the beans as a whole.

§ 68.131 Percentages.

All percentages shall be determined upon the basis of weight, and shall be stated in terms of whole, tenths, and hundredths of a percent as required for individual factors.

§ 68.132 Moisture.

Moisture shall be determined by the use of equipment and procedures prescribed by the Federal Grain Inspection Service, U.S. Department of Agriculture, or determined by any method that gives equivalent results. (Information thereon may be obtained from said Service.)

### 68.133 Grades, grade requirements, special grades and special grade requirements for the class Pea Beans

- 1/ Beans with more than 18.0 percent moisture are graded High moisture.
- 2/ Beans with more than 2.0 percent contrasting classes are graded Mixed beans.
- 3/ Beans with more than 15.0 percent classes that blend are graded Mixed beans.



68.134 Grades and grade requirements for the class Blackeye Beans

PERCENT MAXIMUM LIMITS OF --											
GRADE	GENERAL APPEAR- ANCE	MOISTURE 1/	TOTAL DEFECTS (Total damaged, Total foreign material, Con- trasting classes, Splits)	TOTAL DAMAGED	WEEVIL BORED	CLEAN CUT	FOREIGN MATERIAL		CON- TRASTING CLASSES	CLASSES THAT BLEND	
							TOTAL (includes: Stones)	STONES			
U.S. No. 1		18.0	4.0	2.0	0.0	0.0	0.5	0.2	0.5	5.0	
U.S. No. 2		18.0	6.0	4.0	0.2		1.0	0.4	1.0	10.0	
U.S. No. 3		18.0	8.0	6.0	0.5		1.5	0.6	2.0	15.0	
U.S. Substandard		18.0									
U.S. Sample grade		18.0									
THE SPECIAL GRADE OFF-COLOR MAY BE APPLIED AFTER THE REMOVAL OF TOTAL DEFECTS											
U.S. Substandard shall be beans which do not meet the requirements for the grades U.S. No. 1 through U.S. No. 3 or U.S. Sample grade. Beans which are not well screened shall also be U.S. Substandard, except for beans which meet the requirements for U.S. Sample grade.											
U.S. Sample grade shall be beans which are musty, sour, heating, materially weathered, or weevily; which have any commercially objectionable odor; which contain insect webbing or filth, animal filth, any unknown foreign substance, broken glass, or metal fragments; or which are otherwise of distinctly low quality.											

§ 68.135 Grades and grade requirements for the classes Yelloweye Beans and Cranberry Beans

PERCENT MAXIMUM LIMITS OF --									
GRADE	GENERAL	APPEAR- ANCE	MOISTURE	TOTAL DEFECTS	TOTAL DAMAGED	TOTAL (includes: Stones)	FOREIGN MATERIAL	CON- TRASTING CLASSES	IN ADDITION TO CLASSES THAT
U.S. No. 1			18.0	4.0	2.0	0.5	0.2	0.5	5.0
U.S. No. 2			18.0	6.0	4.0	1.0	0.4	1.0	10.0
U.S. No. 3			18.0	8.0	6.0	1.5	0.6	2.0	15.0
U.S. Substandard			18.0						
U.S. Sample grade			18.0						

1/ Beans with more than 18.0 percent moisture are graded High moisture.

2/ Beans with more than 2.0 percent contrasting classes are graded Mixed beans.

3/ Beans with more than 15.0 percent classes that blend are graded Mixed beans.

■ 68.136 Grades and grade requirements for the class Pinto Beans

		PERCENT MAXIMUM LIMITS OF --									
GRADE		GENERAL	APPEAR- ANCE	MOISTURE	TOTAL DEFECTS	TOTAL (Total damaged, Total foreign material, Con- trasting classes, Splits)	FOREIGN MATERIAL				
							TOTAL	STONES (includes: Stones)	CON- TRASTING	CLASSES THAT BLEND	
U.S. No. 1				18.0	3.0		3.0	0.5	0.2	0.5	5.0
U.S. No. 2				18.0	5.0		5.0	1.0	0.4	1.0	10.0
U.S. No. 3				18.0	7.0		7.0	1.5	0.6	2.0	15.0
U.S. Substandard				18.0							
U.S. Sample grade				18.0							

THE SPECIAL GRADE OFF-COLOR MAY  
BE APPLIED AFTER THE REMOVAL OF  
TOTAL DEFECTS

U.S. Substandard shall be beans which do not meet the requirements  
for the grades U.S. No. 1 through U.S. No. 3 or U.S. Sample grade.  
Beans which are not well screened shall also be U.S. Substandard,  
except for beans which meet the requirements for U.S. Sample grade.  
U.S. Sample grade shall be beans which are musty, sour, heating,  
materially weathered, or weevily; which have any commercially  
objectionable odor; which contain insect webbing or filth, animal  
filth, any unknown foreign substance, broken glass, or metal  
fragments; or which are otherwise of distinctly low quality.

- 1/ Beans with more than 18.0 percent moisture are graded High moisture.
- 2/ Beans with more than 2.0 percent contrasting classes are graded Mixed beans.
- 3/ Beans with more than 15.0 percent classes that blend are graded Mixed beans.

68.137 Grades and grade requirements for the classes Marrow, Great Northern, Small White, Flat Small White, White Kidney, Light Red Kidney, Dark Red Kidney, Small Red, Pink, Black Turtle Soup, and Miscellaneous Beans

PERCENT MAXIMUM LIMITS OF --									
GRADE	GENERAL	MOISTURE	DEFECTS	TOTAL	FOREIGN MATERIAL	CON-	CLASSES	TRASTING	THAT
	APPEAR-	1/	(Total damaged,	Total foreign	TOTAL	STONES	CLASSES	BLEND	
	ANCE		material, Con-	DAMAGED (includes:	Stones)	2/	3/		
			trasting classes,	Splits)					
U.S. No. 1	18.0	2.0	0.5	0.2	0.5	1.0	5.0		
U.S. No. 2	18.0	4.0	1.0	0.4	1.0	1.0	10.0		
U.S. No. 3	18.0	6.0	1.5	0.6	2.0	15.0			
U.S. Substandard	18.0								
U.S. Sample grade	18.0								

- 1/ Beans with more than 18.0 percent moisture are graded High moisture.  
2/ Beans with more than 2.0 percent contrasting classes are graded Mixed beans.  
3/ Beans with more than 15.0 percent classes that blend are graded Mixed beans.

§ 68.138 Grades and grade requirements for the class Mung Beans

PERCENT MAXIMUM LIMITS OF --											
GRADE	GENERAL	APPEARANCE	MOISTURE	DEFECTS	TOTAL	CLEAN	FOREIGN MATERIAL	CON-	CLASSES	CLASSES	CLASSES
			1/	(Total damaged, material, Con- trasting classes, Splits)		WEEVIL CUT	TOTAL (includes: Stones)	TRASTING	STONES	CLASSES	THAT BLEND
U.S. No. 1			18.0	2.0		0.1	0.5	0.2	0.5	5.0	
U.S. No. 2			18.0	4.0		0.2	1.0	0.4	1.0	10.0	
U.S. No. 3			18.0	6.0		0.5	1.5	0.6	2.0	15.0	
U.S. Substandard			18.0								
U.S. Sample grade			18.0								

- 1/ Beans with more than 18.0 percent moisture are graded High moisture.  
 2/ Beans with more than 0.5 percent clean cut weevil bored beans are graded U.S. Sample grade  
 3/ Beans with more than 2.0 percent contrasting classes are graded Mixed beans.  
 4/ Beans with more than 15.0 percent classes that blend are graded Mixed beans.

## PERCENT MAXIMUM LIMITS OF --

- 1/ Beans with more than 18.0 percent moisture are graded High moisture.
- 2/ Beans with more than 2.0 percent contrasting classes are graded Mixed beans
- 3/ Beans with more than 15.0 percent classes that blend are graded Mixed beans.



68.140 Grades and grade requirements for the classes Baby Lima and Miscellaneous Lima Beans

PERCENT MAXIMUM LIMITS OF -												
GRADE	GENERAL	MOISTURE	TOTAL DEFECTS	FOREIGN MATERIAL	BLISTERED	WRINKLED	AND/OR	SPLITS	CLASSES	THAT	BLEND	3/
	APPEAR- ANCE	1/ 2/	(Total damaged, Total foreign material, Con- trasting classes)	BADLY DAMAGED (Includes: Stones)	CON- TRASTING CLASSES	BROKEN						
U.S. No. 1	18.0	2.0	1.0	0.5	0.2	0.5	3.0	3.0	5.0			
U.S. No. 2	18.0	3.0	1.5	1.0	0.3	1.0	5.0	5.0	10.0			
U.S. No. 3	18.0	5.0	2.0	1.5	0.6	2.0	8.0	8.0	15.0			
U.S. Substandard	18.0											
U.S. Sample grade	18.0											

1/ Beans with more than 18.0 percent moisture are graded High moisture.

2/ Beans with more than 2.0 percent contrasting classes are graded Mixed beans.

3/ Beans with more than 15.0 percent classes that blend are graded Mixed beans.

#### § 68.141 Grade Designations.

The grade designation for all classes of beans shall include in the following order:

- (a) the letters "U.S.";
- (b) the name or number of the grade or the name of any applicable special grade designation as appears in § 68.142(a) and (b);
- (c) the class, and in the case of Mixed beans, the name and percentage of each class in the mixture; and
- (d) the special grade designations, if applicable, as appears in § 68.142(c) and (d).

In addition, the designation for the grade "U.S. Substandard" shall include the percentage of sound beans. Mixed beans shall be graded according to the grade requirements of the class of beans which predominates in the mixture. The factors of contrasting classes, classes that blend and sieve size requirements in the class Large Lima beans shall be disregarded in Mixed beans.

#### § 68.142 Special Grade Designations.

(a) Choice handpicked. The special grade designation "Choice handpicked" shall be applicable only to the class Pea beans. The "Choice handpicked" designation shall include in the following order:

- (1) the letters "U.S.";
- (2) the words "Choice handpicked"; and
- (3) "Pea beans".

(b) Prime handpicked. The special grade designation "Prime handpicked" is applicable only to the class Pea beans. The "Prime handpicked" designation shall include in the following order:

- (1) the letters "U.S.";
- (2) the words "Prime handpicked"; and
- (3) "Pea beans."

(c) High moisture. The special grade designation "High moisture" is applicable to all classes of beans containing over 18.0 percent moisture. The words "high moisture" and the percentage of moisture shall follow the class name.

(d) Off-color. The special grade designation "Off-color" shall be applicable to all classes of beans that upon the removal of total defects, are distinctly off-color due to age or any other natural cause but are not materially weathered. The words "off-color" shall follow the name of the class. The special grades "Choice handpicked", "Prime handpicked", and the grade "U.S. No. 1", in the class Pea beans shall not be applied if the beans are determined to be off-color.





